

**ATTACHMENT B COMMENT LETTER # 2**

*SHINGLE SPRINGS CASINO TRAFFIC REVIEW*



June 10, 2005

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**Subject: Shingle Springs Casino Traffic Review**

[P04102]

As requested we have reviewed the Traffic Operations Analysis prepared by David Evans and Associates on August 8, 2001 for the Shingle Springs Rancheria Interchange.

## **Summary of Conclusions and Recommendations**

We have reached the following conclusions.

1. The David Evans report did not evaluate a sufficiently long section of the US 50 freeway. Their analysis stopped short at the East Shingle Springs interchange. They did not consider the impacts of the casino on freeway operations west of that interchange. Their proposed mitigation measure, an eastbound auxiliary lane between the East Shingle Springs Drive Interchange and the proposed Rancheria (Casino) interchange, is consequently inadequate.
2. Recent traffic counts (summer 2004) indicate that existing plus project will cause level of service "F" conditions on US 50, west of the East Shingle Springs Drive Interchange. The proposed auxiliary lane mitigation east of East Shingle Springs Drive would not mitigate this deficiency.
3. David Evans based their trip generation estimates on information available back in 2001. These estimates are not supported by more recent studies of the Thunder Valley Casino or by other traffic studies of Indian gaming casinos in California. Updating the David Evans analysis with the new trip generation rates would cause the analysis to show that the proposed auxiliary lane is not sufficient to fully mitigate the impacts of the project on US 50 freeway operations under either existing conditions or future 2025 cumulative conditions.
4. The David Evans pass-by trip assumptions for the casino project are not supported by other traffic studies of Indian gaming casinos in California. Specifically, the traffic study for the Thunder Valley Casino on State Route 65 near Interstate 80 did not incorporate a reduction for freeway pass-by trips in its analysis. Traffic studies of other Indian gaming casinos in California also have not included a pass-by trip reduction. In addition, the David Evans 40% of casino trip generation pass-by

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reduction appears to directly conflict with the 8% of US 50 traffic capture rate estimate developed by the USI market analysis for the Shingle Springs casino.

5. It is our recommendation that the David Evans analysis be extended westward to identify and develop mitigation measures for all of the sections of US 50 that are impacted by the project. The traffic counts, forecasts, trip rates and pass-by assumptions should also be updated to more accurately represent the likely traffic impacts of the proposed casino project.

## Summary of David Evans Report

David Evans relied upon traffic counts for the US 50 freeway that were conducted in 1999 west of Ponderosa Road. Various assumptions and methods were then used to extend this count to estimated weekday and Saturday peak hour ramp and freeway volumes for the freeway east of Ponderosa Road.

The El Dorado County traffic model for the 1996 County General Plan was used to obtain cumulative no-project volumes for US 50. The model's 2022 forecasts were factored up to obtain 2025 forecasts. David Evans believed that the model's forecasts for US 50 were unreasonably low east of East Shingle Springs Drive, so they developed estimated cumulative volumes for the ramps at this interchange and used those volumes to compute a new forecast for US 50 east of East Shingle Springs Drive.

## Trip Generation

The project traffic was estimated by David Evans based on the Urban Systems Marketing Study for the Shingle Springs Casino and reported trip generation surveys of Indian gaming casinos ranging in size from 17,000 square feet to 78,000 square. Since these casinos were much smaller than the proposed casino, David Evans decided that the trip generation rates coming out of these studies were generally too high (3.02 AM, 5.95 PM, 6.73 Saturday) and selected the trips rates implied by the Casino Marketing Study (2.95 AM, 4.95 PM, 6.90 Saturday). The Marketing Study did not produce an AM peak hour estimate, so David Evans took 60% of the PM peak hour rate to get the AM peak hour rate. About 25% of the hotel trips were assumed to be additive to the casino trips. Their final estimate was that the combined 238,500 square foot casino and 250 room hotel would generate 9,918 weekday trips and 14,600 Saturday trips, with 739 trips during the weekday morning peak hour, 1,219 trips during the weekday PM peak hour, and 1,691 trips during the Saturday peak hour for the peak summer month.

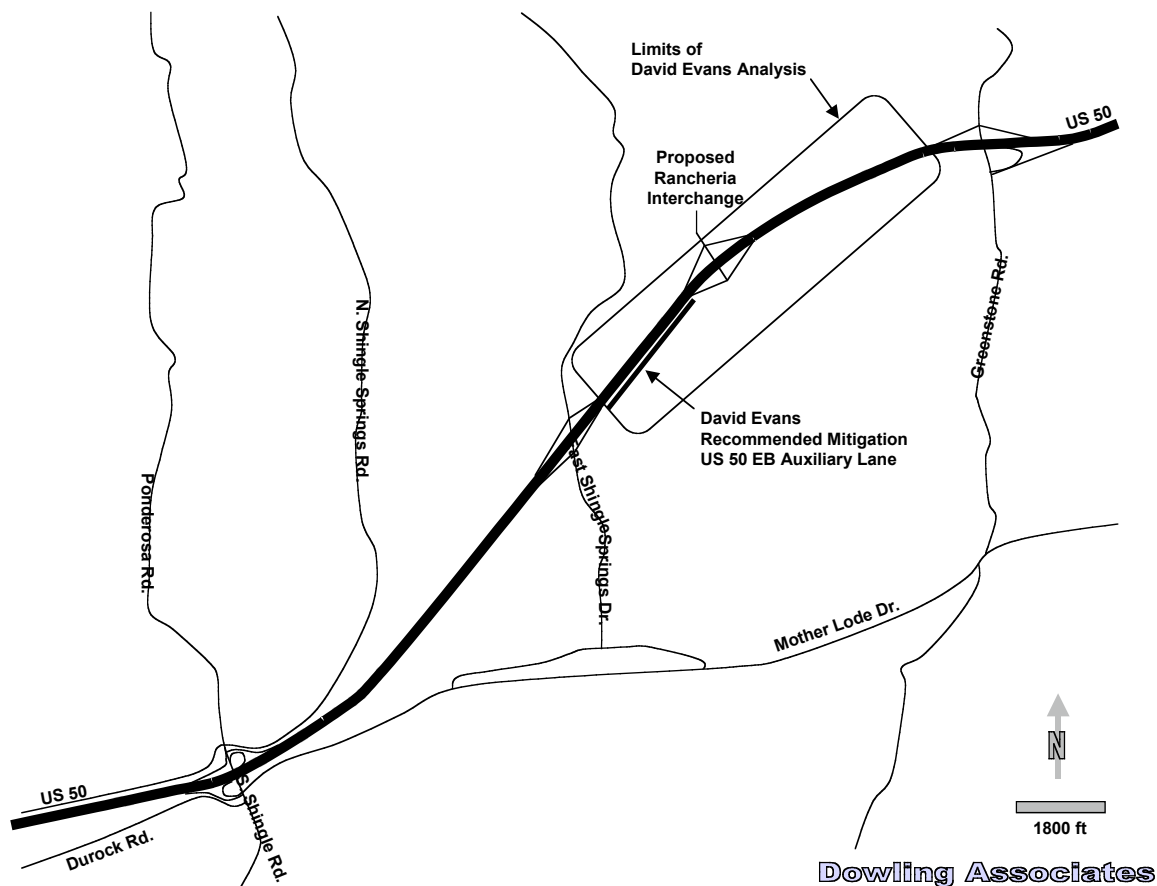
## Trip Distribution

The David Evans study assumed that 80% of the project traffic would come from and go to the west, based on the Urban Systems Marketing Study. The remaining 20% would come from and go to the east.

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They noted that the Urban Systems Marketing Study identified that potentially 42.7% of the casino traffic might be “intercepted” traffic, traffic that would have otherwise gone to South Lake Tahoe and/or the Stateline casinos in the absence of the proposed Shingle Springs Casino. Another 15% of the Shingle Springs Casino traffic would be “pass-by” trips (called “diverted”, in their report), trips that were bound for South Lake Tahoe, but which make an extra stop at the Shingle Springs Casino on their way to the lake.

#### Exhibit 1. Location Map



David Evans adopted a 40% pass-by assumption for the Shingle Springs Casino analysis. Sixty percent of the project trip generation would be new trips added to the US 50 freeway, 40% would be existing trips otherwise passing by the casino, but now stopping at the casino.

Their final estimate was therefore that the combined 238,500 square foot casino and 250 room hotel would add 443 new trips during the weekday morning peak hour, 732 new trips

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during the weekday PM peak hour, and 1,015 new trips during the Saturday peak hour to the US 50 freeway during the peak summer month.

**Exhibit 2. David Evans Trip Generation Estimates**

AM Peak Hour

|                 |        | Rate | Trips | 40.0%<br>Passby | Net |
|-----------------|--------|------|-------|-----------------|-----|
| 238,500 Sq. Ft. | Casino | 2.95 | 704   | -282            | 422 |
| 250 Rooms       | Hotel  | 0.14 | 35    | -14             | 21  |
| Total           |        |      | 739   | -296            | 443 |

PM Peak Hour

|       |        | Rate | Trips | 40.0%<br>Passby | Net |
|-------|--------|------|-------|-----------------|-----|
|       | Casino | 4.95 | 1181  | -472            | 709 |
|       | Hotel  | 0.15 | 38    | -15             | 23  |
| Total |        |      | 1219  | -487            | 732 |

Saturday Peak  
Hour

|       |        | Rate | Trips | 40.0%<br>Passby | Net  |
|-------|--------|------|-------|-----------------|------|
|       | Casino | 6.90 | 1646  | -658            | 988  |
|       | Hotel  | 0.18 | 45    | -18             | 27   |
| Total |        |      | 1691  | -676            | 1015 |

Source: Table 13, page 38, Shingle Springs Rancheria Interchange,  
Final Traffic Operations Analysis, David Evans & Associates, Aug. 8, 2001.

**Level of Service Results**

David Evans evaluated existing, existing plus project, cumulative, and cumulative plus project conditions for the Rancheria Interchange and the US 50 freeway mainline on both sides of the proposed Rancheria Interchange.

They concluded that no mitigations to US 50 freeway would be required for existing plus project conditions.

For cumulative plus project conditions they determined that the US 50 freeway would operate at level of service "F" in the eastbound direction during the weekday PM peak hour unless mitigated. Their recommended mitigation was to construct an auxiliary lane

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between the East Shingle Springs Drive on-ramp and the proposed Rancheria off-ramp for the eastbound direction of US 50.

They also recommended that a traffic management plan be established and implemented to minimize traffic impacts to US 50 during special events at the casino.

## Exhibit 3. David Evans Freeway Analysis Results (Cumulative 2025 Plus Project With Mitigation)

| WB      | vph | LOS          | v/c |                         | vph  | LOS | v/c |           | vph  | LOS | v/c  |            |
|---------|-----|--------------|-----|-------------------------|------|-----|-----|-----------|------|-----|------|------------|
| AM      |     | Not Analyzed |     | East                    | 3122 | E   | 89% | Rancheria | 3148 | E   | 90%  | Greenstone |
| PM      |     | Not Analyzed |     | Shingle                 | 2572 | D   | 74% |           | 2394 | D   | 68%  |            |
| SAT     |     | Not Analyzed |     | Springs                 | 2922 | E   | 93% |           | 2559 | E   | 81%  |            |
| 2-Lanes |     |              |     | 2-Lanes                 |      |     |     | 2-Lanes   |      |     |      |            |
| 2-Lanes |     |              |     | 3-Lanes (w. Mitigation) |      |     |     | 2-Lanes   |      |     |      |            |
| EB      | vph | LOS          | v/c |                         | vph  | LOS | v/c |           | vph  | LOS | v/c  |            |
| AM      |     | Not Analyzed |     |                         | 2396 | B   | 45% |           | 2137 | C   | 61%  |            |
| PM      |     | Not Analyzed |     |                         | 3751 | D   | 71% |           | 3490 | E   | 100% |            |
| SAT     |     | Not Analyzed |     |                         | 3056 | C   | 64% |           | 2816 | E   | 89%  |            |

Sources:  
Table 21, page 59, and Appendix F of David Evans Report, Appendix K of EIR

Note: David Evans did not evaluate freeway operations west of the East Shingle Springs interchange.

## Issue #1 – Failure to Identify & Mitigate Significant Congestion Impacts Farther Away From the Project on US 50

David Evans limited the analysis of traffic impacts on the US 50 Freeway to the immediate vicinity of the proposed Rancheria Interchange (i.e., one interchange east and west of the project). Their cumulative plus project results showed that the existing 2 lanes in each direction of US 50 would not be adequate to serve forecasted traffic from the Rancheria. They recommended the addition of an eastbound auxiliary lane to mitigate the project impacts within the boundary of their analysis. They failed, however, to consider the impacts of the project farther west of the East Shingle Springs Drive interchange.

Employing the El Dorado County General Plan 2004 model traffic forecasts for the East Shingle Springs Drive ramps, we have extended the David Evans analysis, without modification, to west of the East Shingle Springs Drive interchange. We subtracted the forecasted off-ramp volumes and added the forecasted on-ramp volumes at East Shingle Springs to the David Evans forecasts to arrive at the forecasted US 50 freeway volumes west of East Shingle Springs Drive.

The extended analysis shows that the two-lane section of eastbound US 50, between the Ponderosa Road and East Shingle Springs Drive interchanges would operate at level of

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service “F” during both the weekday PM peak hour and the Saturday peak hour under cumulative (2025) plus project conditions.

### Exhibit 4. Extension of David Evans Cumulative 2025 Analysis West of East Shingle Springs Drive

| WB         | vph  | LOS | v/c  | East Shingle Springs    | vph  | LOS | v/c | Rancheria | vph  | LOS | v/c  | Greenstone |
|------------|------|-----|------|-------------------------|------|-----|-----|-----------|------|-----|------|------------|
| AM         | 3192 | E   | 91%  |                         | 3122 | E   | 89% |           | 3148 | E   | 90%  |            |
| PM         | 2672 | D   | 76%  |                         | 2572 | D   | 74% |           | 2394 | D   | 68%  |            |
| SAT        | 3022 | E   | 96%  |                         | 2922 | E   | 93% |           | 2559 | E   | 81%  |            |
| 2-Lanes WB |      |     |      | 2-Lanes                 |      |     |     | 2-Lanes   |      |     |      |            |
| 2-Lanes EB |      |     |      | 3-Lanes (w. Mitigation) |      |     |     | 2-Lanes   |      |     |      |            |
| EB         | vph  | LOS | v/c  |                         | vph  | LOS | v/c |           | vph  | LOS | v/c  |            |
| AM         | 2504 | D   | 72%  |                         | 2396 | B   | 45% |           | 2137 | C   | 61%  |            |
| PM         | 3850 | F   | 110% |                         | 3751 | D   | 71% |           | 3490 | E   | 100% |            |
| SAT        | 3155 | F   | 100% |                         | 3056 | C   | 64% |           | 2816 | E   | 89%  |            |

#### Sources:

Table 21, page 59, and Appendix F of David Evans Report, Appendix K of EIR  
Caltrans 2003 Ramp Volumes on California State Freeway System, May 2004, District 03.

The eastbound auxiliary lane recommended by David Evans would have to be extended through the East Shingle Springs Interchange and further westward to fully mitigate the impacts of the project on the US 50 freeway. Our analysis shows that the third lane mitigation must extend at least from Ponderosa Road to the proposed Rancheria Interchange. Our analysis suggests that even this mitigation may not extend sufficiently far enough west to mitigate the project impacts. We have not analyzed other sections of US 50 west of Ponderosa to see how far west the mitigation would have to extend.

## Issue #2 – Casino Traffic Will Immediately Exceed Caltrans Congestion Thresholds on US 50

A review of traffic counts collected in the summer of 2004 indicates that most of the growth forecast by David Evans for 2025 has already occurred. This means that US 50 has little capacity to absorb the traffic that will be generated by the Rancheria. Our analysis shows that when David Evans estimates of traffic from the project are combined with the counts observed in 2004, level of service thresholds set by both Caltrans and El Dorado County for US 50 will immediately be exceeded.

Exhibit 5 provides a summary of both mean and maximum counts recorded by Caltrans between Ponderosa Road and East Shingle Springs Road during the summer of 2004. It shows that the highest volumes are recorded in the eastbound lanes during the weekday PM peak hours. A comparison of the counts recorded by David Evans in 1999, the 2004 summer Caltrans counts and the David Evans forecast for 2025 is presented in exhibit 6. It shows that in the 5-year period between 1999 and 2004, traffic growth on US 50 consumed between 53 and 98 percent of the 26 year forecast that David Evans prepared for 2025.

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Clearly, David Evans dramatically underestimated the level of growth that can be expected by 2025.

**Exhibit 5. US 50 Traffic Counts Between Ponderosa Rd and East Shingle Springs**

| Direction | Peak | Mean Peak Hour Volumes (Summer 2004) |         |          |      |
|-----------|------|--------------------------------------|---------|----------|------|
|           |      | Weekday                              | Weekend | All Days | Max  |
| WB        | AM   | 2720                                 | 2325    | 2611     | 3162 |
| WB        | PM   | 2183                                 | 2453    | 2264     | 2941 |
| EB        | AM   | 1903                                 | 2161    | 1975     | 2558 |
| EB        | PM   | 3261                                 | 2299    | 2977     | 3518 |

Source: Caltrans 03, May 2005 (continuous counts collected June 1 – August 31, 2004)

**Exhibit 6. Comparison of David Evans Forecasts to Caltrans Counts**

|        | D. Evans<br>1999 | D. Evans<br>2025 | D. Evans<br>1999 – 2025 | Growth<br>1999-2004 | % of Growth<br>Used by 2004 |
|--------|------------------|------------------|-------------------------|---------------------|-----------------------------|
| WB AM  | 2206             | 3086             | 880                     | 514                 | 58.4                        |
| WB PM  | 1589             | 2316             | 727                     | 594                 | 81.7                        |
| WB Sat | 1691             | 2465             | 774                     | 762                 | 98.4                        |
| EB AM  | 1229             | 2150             | 921                     | 674                 | 73.2                        |
| EB PM  | 2407             | 3441             | 1034                    | 854                 | 82.6                        |
| EBSAT  | 1872             | 2681             | 809                     | 427                 | 52.8                        |

Source: Caltrans 2004 = Caltrans 03, June 1-August 31 2004 Counts

Source: David Evans 1999 = Table 4, page 20

Source: David Evans 2025 Cumulative = Table 21, page 59

All volumes shown here exclude the casino project

When the project generated trips estimated by David Evans are added to the mean weekday and Saturday peak hour volumes counted in 2004 the result is that the section of US 50 eastbound, west of the East Shingle Springs Drive Interchange, will operate at Level of Service “F” during the weekday PM peak hour (see Exhibit 7 below). The David Evans recommended auxiliary lane mitigation measure would not extend far enough west to mitigate this deficiency.



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**Exhibit 7. Update of David Evans Existing + Project Analysis Using Summer 2004 Counts**

| WB         | vph  | LOS | v/c  |                         |         |      |     |         |  |           |      |     |     |
|------------|------|-----|------|-------------------------|---------|------|-----|---------|--|-----------|------|-----|-----|
| AM         | 2775 | D   | 79%  |                         | East    | vph  | LOS | v/c     |  | Rancheria | vph  | LOS | v/c |
| PM         | 2453 | D   | 70%  |                         | Shingle | 2756 | D   | 79%     |  |           | 2782 | D   | 80% |
| SAT        | 2864 | E   | 91%  |                         | Springs | 2439 | D   | 70%     |  |           | 2261 | C   | 65% |
|            |      |     |      |                         |         | 2846 | E   | 90%     |  |           | 2483 | D   | 79% |
| 2-Lanes WB |      |     |      | 2-Lanes                 |         |      |     | 2-Lanes |  |           |      |     |     |
| 2-Lanes EB |      |     |      | 3-Lanes (w. Mitigation) |         |      |     | 2-Lanes |  |           |      |     |     |
| EB         | vph  | LOS | v/c  |                         |         | vph  | LOS | v/c     |  |           | vph  | LOS | v/c |
| AM         | 2165 | C   | 62%  |                         |         | 2149 | B   | 41%     |  |           | 1890 | C   | 54% |
| PM         | 3605 | F   | 103% |                         |         | 3571 | D   | 68%     |  |           | 3310 | E   | 95% |
| SAT        | 2633 | D   | 84%  |                         |         | 2605 | C   | 55%     |  |           | 2365 | D   | 75% |

**Sources:**

Table 21, page 59, and Appendix F of David Evans Report, Appendix K of EIR  
Caltrans 2003 Ramp Volumes on California State Freeway System, May 2004, District 03.

## Issue #3 – Thunder Valley Survey Indicates Traffic Impacts on U.S. 50 Will Be Worse Than Originally Projected

David Evans selected trip generation rates for the proposed casino based on the Urban Systems Marketing Study. They generally discounted the surveys of trip generation for existing Indian gaming casinos in California because the casinos surveyed were less than half the size of the proposed Shingle Springs Rancheria Casino. This was a reasonable approach based on the information available at that time. However, the recent opening of the Thunder Valley Casino provides a similar large size casino for comparison to the Shingle Springs Casino. It is no longer necessary to rely upon strictly a market analysis.

To determine if the marketing survey based trip generation estimate by David Evans was an accurate representation of the actual trip generation of the much larger Shingle Springs Casino, we conducted six days of trip generation counts over a two month period of the 200,000 square foot Thunder Valley Casino off of SR 65 in Placer County, near Lincoln, Ca.

### Trip Generation Survey of Thunder Valley Casino

Dowling Associates conducted traffic counts at all of the driveways for the Thunder Valley Casino over 6 days in January and March 2005. The count included weekdays and weekends. This casino was selected for the survey because of its comparable size to the proposed Shingle Springs Casino, and because of its comparable location, near a freeway leading to the Nevada casinos.

The Thunder Valley Casino is located on the north side of Athens Avenue, Just west of Industrial Avenue in Placer County. The casino is about one mile away from the SR 65/Twelve bridges interchange and 6 miles away from the Interstate 80 freeway leading to Reno.

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Thunder Valley is a 200,000 square foot casino with 4 driveways leading to off-street parking surrounding the casino. Two additional driveways, off of Sparta Court serve an overflow/employee parking lot. One of these additional driveways is closed.

The number of vehicles entering and leaving each of the 5 open driveways were counted for two hours each during the weekday AM peak period (7-9 AM), the weekday PM peak period (4-6 PM), and the Saturday afternoon peak period (5-7 PM). The counts were conducted on Saturday January 15, Tuesday January 18, Thursday March 3, Saturday March 5, Wednesday March 9 and Saturday March 12, 2005.

The exhibit below shows the results of these driveway traffic counts for the Thunder Valley Casino. The average trip generation for the Thunder Valley Casino was 486 AM peak hour and 1012 PM peak hour vehicle trip ends for a weekday, and 1,653 vehicle trip ends for a Saturday peak hour.

Since the counts were performed in January and March, and it was desired to obtain trip generation rates for the peak gaming months of May, July, and August, the traffic counts conducted in non-peak months were adjusted for seasonal variation. Based on the article "Gaming Casino Traffic", in the ITE Journal, March 1998, casino trip generation surveys in January and March should be multiplied by the seasonal adjustment factor of 1.1 to obtain trip generation estimates for the peak gaming months of the year.

The seasonally adjusted vehicle trip generation for AM, PM, and Saturday peak hours is shown in the exhibit below. Thunder Valley generates 534 AM peak hour, 1,113 PM peak hour, and 1,818 Saturday peak hour vehicle trip ends during the peak gaming months of the year.

**Exhibit 8: Traffic Counts at the Thunder Valley Casino**

| Summary of Trip Generation Counts  |           |          |           | January-March 2005 |                              |
|--|-----------|----------|-----------|--------------------|------------------------------|
| Thunder Valley Casino, Placer County, CA   |           |          |           | Dowling Associates |                              |
|  | 1/18/2005 | 3/3/2005 | 3/9/2005  | Average            | Seasonal Factor <sup>1</sup> |
| Weekday AM Peak Hour   | 488       | 470      | 499       | 486                | <b>534</b>                   |
| Weekday PM Peak Hour   | 982       | 1,057    | 997       | 1,012              | <b>1,113</b>                 |
|  | 1/15/2005 | 3/5/2005 | 3/12/2005 | Average            | Seasonal Factor <sup>1</sup> |
| Saturday Peak Hour   | 1,705     | 1,719    | 1,535     | 1,653              | <b>1,818</b>                 |
| Note:  |           |          |           |                    |                              |
| 1. The peak gaming months are reported as May, July, and August. Thus, the monthly variation should be applied a multiplier. The seasonal adjustment factor is 1.1 of January and March. ITE Journal March 1998. |           |          |           |                    |                              |

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Dividing the seasonally adjusted traffic volumes by the square footage of the Thunder Valley Casino results in the following trip generation rates: 2.67 trips/thousand square feet for the AM peak hour, 5.57 trips/thousand square feet for the PM peak hour and 9.09 trips per thousand square feet for the Saturday Peak hour.

### Trip Generation Estimates For Shingle Springs

Based on the Thunder Valley Casino trip generation study results, the appropriate trip generation rates to use for Shingle Springs should be 2.67 trips for the AM peak hour, 5.57 trips for the PM peak hour and 9.09 trips per thousand square feet for the Saturday Peak hour. These rates are lower than the 2.95 AM peak hour rate used by David Evans (DE&A), and higher than the 4.95 PM peak hour 6.90 Saturday peak hour rates used by DE&A in their analysis of the Shingle Springs Casino. Exhibit 9 below shows the impacts of the improved trip generation rates on the estimated trip generation for the Shingle Springs Casino

**Exhibit 9: David Evans (DE&A) and Dowling Trip Generation Comparison**

|         | AM Peak Hour |       | PM Peak Hour |       | Saturday Peak Hour |       |
|---------|--------------|-------|--------------|-------|--------------------|-------|
| Study   | Rate         | Trips | Rate         | Trips | Rate               | Trips |
| DE&A    | 2.95         | 704   | 4.95         | 1,181 | 6.90               | 1,646 |
| Dowling | 2.67         | 637   | 5.57         | 1,327 | 9.09               | 2,168 |

The forecasted trip generation for the Shingle Springs Casino is 10% lower than the David Evans analysis for the AM peak hour. However the forecasted trip generation for the PM peak hour is 12% higher, and 32% higher for the Saturday peak hour.

### Impacts on US 50 Level of Service

The revised trips generated by the project were assigned to the US 50 freeway for two scenarios: existing + project (i.e., Caltrans 2004 counts plus the Thunder Valley based trip generation rates) and cumulative + project (i.e., the David Evans forecast of traffic in 2025 plus the Thunder Valley based trip generation rates). Both scenarios used the same distributions and pass-by volumes employed by David Evans.

### Existing plus Project Level of Service Analysis

The existing traffic volumes on the freeway mainline were based on the traffic counts collected in 2004. The project casino-generated trips were calculated using the new casino trip generation rates (from the Thunder Valley Casino) and with the David Evans' pass-by traffic percentages. The ramp volumes on Rancheria Interchange (proposed Casino) were based on the David Evans' report with the corrected Casino trips. The ramp volumes on East Shingle Springs Interchange were based on the ramp daily traffic volumes published by Caltrans District 3 in 2004. The ratios of peak hour traffic to daily traffic on the freeway mainline by direction for each peak hour were applied to the ramp daily traffic counts to obtain peak hour volumes.

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Exhibit 10 shows the result of updated freeway mainline level of service of Existing plus Project conditions. The section of the US 50 freeway between Ponderosa Road and East Shingle Springs interchange would operate at level of service “F” in the eastbound direction during the weekday PM peak hour. Other sections of US 50 farther west might also operate at LOS “F”, but these sections were not studied.

**Exhibit 10: Freeway Mainline LOS Analysis of Existing (2004) Plus Project Scenario**

| WB         | vph  | LOS | v/c  | East Shingle Springs    | vph  | LOS | v/c | Rancheria | vph  | LOS | v/c | Greenstone |
|------------|------|-----|------|-------------------------|------|-----|-----|-----------|------|-----|-----|------------|
| AM         | 2774 | D   | 79%  |                         | 2755 | D   | 79% |           | 2776 | D   | 79% |            |
| PM         | 2485 | D   | 71%  |                         | 2471 | D   | 71% |           | 2270 | C   | 65% |            |
| SAT        | 3007 | E   | 95%  |                         | 2989 | E   | 95% |           | 2512 | D   | 80% |            |
| 2-Lanes WB |      |     |      | 2-Lanes                 |      |     |     | 2-Lanes   |      |     |     |            |
| 2-Lanes EB |      |     |      | 3-Lanes (w. Mitigation) |      |     |     | 2-Lanes   |      |     |     |            |
| EB         | vph  | LOS | v/c  |                         | vph  | LOS | v/c |           | vph  | LOS | v/c |            |
| AM         | 2143 | C   | 61%  |                         | 2127 | B   | 40% |           | 1894 | C   | 54% |            |
| PM         | 3642 | F   | 104% |                         | 3608 | D   | 68% |           | 3316 | E   | 95% |            |
| SAT        | 2749 | D   | 87%  |                         | 2721 | C   | 57% |           | 2407 | D   | 76% |            |

**Sources:**

Table 21, page 59, and Appendix F of David Evans Report, Appendix K of EIR  
Caltrans 2003 Ramp Volumes on California State Freeway System, May 2004, District 03.  
Thunder Valley Casino Trip Generation Study, Jan-Mar 2005, Dowling Associates

The section of US 50 between East Shingle Springs and Rancheria would also operate at LOS “F” in the eastbound direction if it were not for the auxiliary lane recommended by David Evans. The above exhibit presumes this mitigation is in place for existing plus project conditions.

## Cumulative 2025 Plus Project Level of Service Analysis

The result for the cumulative (2025) plus project is that the proposed project will cause freeway level of service to breakdown to level of service “F” at several locations and several time periods.

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## Exhibit 11. Cumulative Plus Project LOS With Corrected Trip Generation

| WB         | vph  | LOS | v/c  | East Shingle Springs    | vph  | LOS | v/c | Rancheria | vph  | LOS | v/c  | Greenstone |
|------------|------|-----|------|-------------------------|------|-----|-----|-----------|------|-----|------|------------|
| AM         | 3191 | E   | 91%  |                         | 3121 | E   | 89% |           | 3142 | E   | 90%  |            |
| PM         | 2704 | D   | 77%  |                         | 2604 | D   | 74% |           | 2403 | D   | 69%  |            |
| SAT        | 3165 | F   | 101% |                         | 3065 | E   | 97% |           | 2588 | D   | 82%  |            |
| 2-Lanes WB |      |     |      | 2-Lanes                 |      |     |     | 2-Lanes   |      |     |      |            |
| 2-Lanes EB |      |     |      | 3-Lanes (w. Mitigation) |      |     |     | 2-Lanes   |      |     |      |            |
| EB         | vph  | LOS | v/c  |                         | vph  | LOS | v/c |           | vph  | LOS | v/c  |            |
| AM         | 2482 | D   | 71%  |                         | 2374 | B   | 45% |           | 2141 | C   | 61%  |            |
| PM         | 3887 | F   | 111% |                         | 3788 | D   | 72% |           | 3496 | E   | 100% |            |
| SAT        | 3271 | F   | 104% |                         | 3172 | C   | 67% |           | 2858 | E   | 91%  |            |

Sources:

Table 21, page 59, and Appendix F of David Evans Report, Appendix K of EIR  
Thunder Valley Casino Trip Generation Study, Jan-Mar 2005, Dowling Associates

US 50 will operate at level of service "F" in the eastbound direction west of East Shingle Springs Drive, during both the weekday PM and Saturday peak hours. US 50 will also operate at level of service "F" in the westbound direction, west of the East Shingle Springs Drive interchange during the Saturday peak hour. This analysis did not determine how far west the congestion would extend during both the weekday PM peak hour and the Saturday peak hour.

## Issue #4 – Implausible Pass-By Estimates Indicate Traffic Impacts on U.S. 50 Will Be Much Worse Than Originally Projected

The David Evans estimate of 40% pass-by trips is implausibly high in light of various data that are available.

First of all, a review of 15 other traffic impact studies of Indian gaming casinos in California found that none of them had discounted the casino trip generation for pass-by, diverted, or intercepted trips. These studies are listed below:

## Exhibit 12. List of Traffic Studies Consulted for Pass-By Methodology

| Title   | Date           | Author                                     | Location                 |
|---|----------------|--|--------------------------|
| Traffic Needs Assessment of Indian Development Projects in the San Diego Region - Spring 2002 | March, 2003    | County of San Diego, Dept. of Public Works | San Diego County         |
| Gun Lake Casino Final Traffic Study   | November, 2001 | URS Corporation, Grand Rapids, Michigan    | Allegan County, Michigan |
| Local Impact Analysis of the Proposed Hood River Casino                                       | October, 1998  | ECONorthwest, Portland, OR                 | Portland, Oregon         |
| Beloit Casino and Entertainment Complex   | June, 2004     | HNTB, Madison, Wisconsin                   | Beloit, Wisconsin        |
| San Pablo Casino Traffic Analysis Preliminary   | January,       | Katz, Okitsu & Associates.                 | Contra Costa,            |

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| Title  | Date          | Author   | Location      |
|--|---------------|--|---------------|
| Findings   | 2005          |  | CA            |
| Bridgeport Casino Traffic Impacts on the South Western Region of Connecticut   | July, 2001    | Buckhurst Fish & Jacquemart Inc. New York, NY  | Connecticut   |
| Recalibration of Trip Generation Model for Las Vegas Hotel/Casino  | May, 2002     | Kimley-Horn, Denver, CO. ITE Journal   | Las Vegas, NV |
| Preliminary Evaluation of the Environmental Impacts of a Resort Casino Proposed by the Federated Indians of the Graton Rancheria at Lakeville Highway and State Highway 37 in Southern Sonoma County, California | July, 2003    | The Bay Institute Marc Holmes, Sonoma Land Trust Wendy Eliot, Sonoma Ecology Center Caitlin Cornwall | Sonoma, CA    |
| Traffic Impact Study for the Auburn Rancheria Gaming Facility  | October, 2000 | Fehr & Peers, Roseville, CA  | Roseville, CA |
| Cache Creek Hotel Development and Casino Expansion Traffic Impact Analysis   | May, 2002     | CCS Planning and Engineering, Inc. Sacramento, CA  | Yolo, CA      |
| Mississippi Gulf Coast Transportation Management Plan for Waterfront Development   | June, 1993    | Burk-Kleinpeter, Inc.  | Gulfport, MS  |
| Buena Vista Casino Development   | July, 2000    | KD Anderson Transportation Engineers, Roseville, CA  | Reno, NV      |
| Gaming Facility  | March, 1998   | Crawford, Bunte, Brammeier. ITE Journal  | St. Louis, MO |
| Casino Transportation Planning   | January, 2003 | ITE Technical Committee  |               |
| United Auburn Indian Community of the Auburn Rancheria   | June, 2000    | United Auburn Indian Community   | Newcastle, CA |

Secondly, the USI, "Shingle Springs, California Gaming and Hotel Market Assessment", October 1999, estimates that only 8% of the existing traffic on US 50 would be captured by the proposed casino<sup>1</sup>. The table below compares the difference in the number of pass-by trips estimated using the 40% of casino trip generation used by David Evans and the 8% of existing freeway traffic used by USI.

Thirdly, the David Evans estimate of pass-by trips for the casino is equal to 34% of the total weekday PM peak hour traffic passing over Echo Summit on US 50. The assumed casino pass-by trips are equal to 47% of the total traffic on Echo Summit on weekends. See above table.

Finally, the 2004 General Plan El Dorado County Traffic model predicts that only 637 AM peak hour trips and 637 PM peak hour trips would travel through the county to South Lake Tahoe and Stateline, Nevada. The David Evans estimate of pass-by trips would be

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<sup>1</sup> Note: David Evans assumed that 40% of the trips generated by the casino would be existing trips already on US 50 (pass-by trips). The USI marketing study estimated that the casino would draw 8% of the existing trips on US 50. When the two different estimates are applied to the casino traffic and the US 50 traffic, the conflict between the two estimates becomes apparent.

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equivalent to one-third of the AM through trips and two-thirds of the PM through trips passing through El Dorado County on US 50.

**Exhibit 13. Comparison of USI and David Evans (DE&A) Pass-By Trip Estimates**

| Analysis Period      | Trips                            |  | Pass-By Capture Rates                              |  | Pass-By Capture Trips       |               | DE&A   |
|----------------------|----------------------------------|--|--|--|-----------------------------|---------------|--|
|                      | Casino<br>Generated <sup>1</sup> | On US-50<br>to/from Tahoe <sup>2</sup> | % of Casino<br>Trips (DE&A<br>Method) <sup>3</sup> | % of US-50<br>Trips (USI<br>Method) <sup>4</sup> | DE&A<br>Method <sup>5</sup> | USI<br>Method | Method Pass-<br>By Trips as<br>% of US-50<br>Trips |
| Weekday AM Peak Hour | 739                              | 1,078                                  | 40%  | 8%   | 296                         | 86            | 27%  |
| Weekday PM Peak Hour | 1,219                            | 1,433                                  | 40%  | 8%   | 487                         | 115           | 34%  |
| Saturday Peak Hour   | 1,691                            | 1,444                                  | 40%  | 8%   | 677                         | 115           | 47%  |

Notes:

- 1 - From David Evans & Associates, "Shingle Springs Rancheria Interchange Traffic Operations Analysis", August 8, 2001, Table 11, p. 33.
- 2 - Caltrans Traffic Volumes for US-50 at S.R. 89 from June 2004. Used count location close to Lake Tahoe to estimate the amount of traffic headed to and from Tahoe on U.S. 50 at the Shingle Springs project site.
- 3 - From David Evans & Associates, "Shingle Springs Rancheria Interchange Traffic Operations Analysis", August 8, 2001, p. 41.
- 4 - From USI, "Shingle Springs, California Gaming and Hotel Market Assessment", October 1999, p. 19.
- 5 - From David Evans & Associates, "Shingle Springs Rancheria Interchange Traffic Operations Analysis", August 8, 2001, Table 14, p. 43.

Reduction of the David Evans pass-by percentage assumption by any amount would significantly increase the estimated impacts of the project on US 50.

## Acknowledgements

I would like to acknowledge the technical work of Mr. Chris Ferrell, Mr. Allen Huang and Mr. Ka-Fai Wong, of Dowling Associates on this analysis. I would like to thank Mr. Ron Milam of Fehr & Peers for providing the model information.

Please contact me at 916-266-2190 x302 if you have any questions.

Sincerely,

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